Amendments to the Specification

Please replace paragraph [0157] with the following revised paragraph.

[0157] This general strategy was demonstrated in connection with the generation of the first ~~XenoMouse™~~XENOMOUSE™ transgenic mouse system strains as published in 1994. *See* Green et al. *Nature Genetics* 7:13-21 (1994). The ~~XenoMouse™~~XENOMOUSE™ transgenic mouse system strains were engineered with yeast artificial chromosomes (YACS) containing germline configuration fragments of the human heavy chain locus and kappa light chain locus, respectively, which contained core variable and constant region sequences. Id. The human Ig containing YACs proved to be compatible with the mouse system for both rearrangement and expression of antibodies and were capable of substituting for the inactivated mouse Ig genes. This was demonstrated by their ability to induce B-cell development, to produce an adult-like human repertoire of fully human antibodies, and to generate antigen-specific human monoclonal antibodies. These results also suggested that introduction of larger portions of the human Ig loci containing greater numbers of V genes, additional regulatory elements, and human Ig constant regions might recapitulate substantially the full repertoire that is characteristic of the human humoral response to infection and immunization. The work of Green et al. was recently extended to the introduction of greater than approximately 80% of the human antibody repertoire through introduction of megabase sized, germline configuration YAC fragments of the human heavy chain loci and kappa light chain loci, respectively, to produce ~~XenoMouse™~~XENOMOUSE™ transgenic mouse system mice. *See* Mendez et al. *Nature Genetics* 15:146-156 (1997), Green and Jakobovits *J Exp. Med.* 188:483-495 (1998), Green, *Journal of Immunological Methods* 231:11-23 (1999) and U.S. Patent Application Serial No. 08/759,620, filed December 3, 1996, the disclosures of which are hereby incorporated by reference.

Please replace paragraph [0160] with the following revised paragraph.

[0160] Monoclonal antibodies specific for PA polypeptides may be prepared using hybridoma technology. (Kohler et al., Nature 256:495 (1975); Kohler et al., Eur. J. Immunol. 6:511 (1976); Kohler et al., Eur. J. Immunol. 6:292 (1976); Hammerling et al., in: Monoclonal

Antibodies and T-Cell Hybridomas, Elsevier, N.Y., pp. 571-681 (1981)). Briefly, ~~XenoMouse™~~XENOMOUSE™ transgenic mouse system mice may be immunized with PA polypeptides. After immunization, the splenocytes of such mice are extracted and fused with a suitable myeloma cell line. Any suitable myeloma cell line, such as the myeloma cell line (SP2O), available from the ATCC, may be employed in accordance with the present invention; however, it is preferable to employ the parent myeloma cell line (SP2O), available from the ATCC. After fusion, the resulting hybridoma cells are selectively maintained in HAT medium, and then cloned by limiting dilution as described by Wands et al. (Gastroenterology 80:225-232 (1981)). The hybridoma cells obtained through such a selection are then assayed to identify clones which secrete antibodies capable of binding the PA polypeptides.

Please replace paragraph [0278] with the following revised paragraph.

[0278] In other embodiments, antibody and antibody compositions of the invention may be administered in combination with anti-opportunistic infection agents. Anti-opportunistic agents that may be administered in combination with the antibody and antibody compositions of the invention, include, but are not limited to, ~~DAPSONE™~~dapsone, ~~PENTAMIDINE™~~pentamidine, ~~ATOVAQUONE™~~atovaquone, ~~ISONIAZID™~~isoniazid, ~~RIFAMPIN™~~rifampin, ~~PYRAZINAMIDE™~~pyrazinamide, ~~ETHAMBUTOL™~~ethambutol, ~~RIFABUTIN™~~rifabutin, ~~CLARITHROMYCIN™~~clarithromycin, ~~AZITHROMYCIN™~~azithromycin, ~~GANCICLOVIR™~~ganciclovir, ~~FOSCARNET™~~foscarnet, ~~CIDOFOVIR™~~cidofovir, ~~FLUCONAZOLE™~~fluconazole, ~~ITRACONAZOLE™~~itraconazole, ~~KETOCONAZOLE™~~ketoconazole, ~~ACYCLOVIR™~~acyclovir, ~~FAMCICOLVIR™~~famcicolvir, ~~PYRIMETHAMINE™~~pyrimethamine, ~~LEUCOVORIN™~~leucovorin, NEUPOGEN™ (filgrastim/G-CSF), and LEUKINE™ (sargramostim/GM-CSF). In a specific embodiment, antibody and antibody compositions of the invention are used in any combination with ~~TRIMETHOPRIM-SULFAMETHOXAZOLE™~~trimethoprim-sulfamethoxazole, ~~DAPSONE™~~dapsone, ~~PENTAMIDINE™~~pentamidine, and/or ~~ATOVAQUONE™~~atovaquone to prophylactically treat, prevent, and/or diagnose an opportunistic *Pneumocystis carinii* pneumonia infection. In another specific embodiment, antibody and antibody compositions of the invention

are used in any combination with ~~ISONIAZID™~~isoniazid, ~~RIFAMPIN™~~rifampin, ~~PYRAZINAMIDE™~~pyrazinamide, and/or ~~ETHAMBUTOL™~~ethambutol to prophylactically treat, prevent, and/or diagnose an opportunistic *Mycobacterium avium* complex infection. In another specific embodiment, antibody and antibody compositions of the invention are used in any combination with ~~RIFABUTIN™~~rifabutin, ~~CLARITHROMYCIN™~~clarithromycin, and/or ~~AZITHROMYCIN™~~azithromycin to prophylactically treat, prevent, and/or diagnose an opportunistic *Mycobacterium tuberculosis* infection. In another specific embodiment, antibody and antibody compositions of the invention are used in any combination with ~~GANCICLOVIR™~~ganciclovir, ~~FOSCARNET™~~foscarnet, and/or ~~CIDOFOVIR™~~cidofovir to prophylactically treat, prevent, and/or diagnose an opportunistic cytomegalovirus infection. In another specific embodiment, antibody and antibody compositions of the invention are used in any combination with ~~FLUCONAZOLE™~~fluconazole, ~~ITRACONAZOLE™~~itraconazole, and/or ~~KETOCONAZOLE™~~ketoconazole to prophylactically treat, prevent, and/or diagnose an opportunistic fungal infection. In another specific embodiment, antibody and antibody compositions of the invention are used in any combination with ~~ACYCLOVIR™~~acyclovir and/or ~~FAMCICOLVIR™~~famcicolvir to prophylactically treat, prevent, and/or diagnose an opportunistic herpes simplex virus type I and/or type II infection. In another specific embodiment, antibody and antibody compositions of the invention are used in any combination with ~~PYRIMETHAMINE™~~pyrimethamine and/or ~~LEUCOVORIN™~~leucovorin to prophylactically treat, prevent, and/or diagnose an opportunistic *Toxoplasma gondii* infection. In another specific embodiment, antibody and antibody compositions of the invention are used in any combination with ~~LEUCOVORIN™~~leucovorin and/or NEUPOGEN™ (filgrastim/G-CSF) to prophylactically treat, prevent, and/or diagnose an opportunistic bacterial infection.

Please replace paragraph [0285] with the following revised paragraph.

[0285] In a more preferred embodiment, the antibody and antibody compositions of the invention are administered in combination with an antimalarial, methotrexate, anti-TNF antibody, ENBREL™ (etanercept) and/or suflasalazine. In one embodiment, the antibody and antibody compositions of the invention are administered in combination with methotrexate. In

another embodiment, the antibody and antibody compositions of the invention are administered in combination with anti-TNF antibody. In another embodiment, the antibody and antibody compositions of the invention are administered in combination with methotrexate and anti-TNF antibody. In another embodiment, the antibody and antibody compositions of the invention are administered in combination with suflasalazine. In another specific embodiment, the antibody and antibody compositions of the invention are administered in combination with methotrexate, anti-TNF antibody, and suflasalazine. In another embodiment, the antibody and antibody compositions of the invention are administered in combination ENBREL™ (etanercept). In another embodiment, the antibody and antibody compositions of the invention are administered in combination with ENBREL™ (etanercept) and methotrexate. In another embodiment, the antibody and antibody compositions of the invention are administered in combination with ENBREL™ (etanercept), methotrexate and suflasalazine. In another embodiment, the antibody and antibody compositions of the invention are administered in combination with ENBREL™ (etanercept), methotrexate and suflasalazine. In other embodiments, one or more antimalarials is combined with one of the above-recited combinations. In a specific embodiment, the antibody and antibody compositions of the invention are administered in combination with an antimalarial (e.g., hydroxychloroquine), ENBREL™ (etanercept), methotrexate and suflasalazine. In another specific embodiment, the antibody and antibody compositions of the invention are administered in combination with an antimalarial (e.g., hydroxychloroquine), sulfasalazine, anti-TNF antibody, and methotrexate.

Please replace paragraph [0291] with the following revised paragraph.

[0291] In an additional embodiment, the antibody and antibody compositions of the invention are administered in combination with hematopoietic growth factors. Hematopoietic growth factors that may be administered with the antibody and antibody compositions of the invention include, but are not limited to, LEUKINE™ ~~(SARGRAMOSTIM™)~~(sargramostim/GM-CSF) and NEUPOGEN™ ~~(FILGRASTIM™)~~ (filgrastim/G-CSF).

Please replace paragraph [0300] with the following revised paragraph.

[0300] In a preferred embodiment, the antibody and antibody compositions of the invention are administered in combination with CD40 ligand (CD40L), a soluble form of CD40L (e.g., ~~AVREND™~~ avrend), biologically active fragments, variants, or derivatives of CD40L, anti-CD40L antibodies (e.g., agonistic or antagonistic antibodies), and/or anti-CD40 antibodies (e.g., agonistic or antagonistic antibodies).

Please replace paragraph [0307] with the following revised paragraph.

[0307] In an additional embodiment, antibody and antibody compositions of the invention are administered alone or in combination with one or more intravenous immune globulin preparations. Intravenous immune globulin preparations that may be administered with the antibody and antibody compositions of the invention include, but not limited to, GAMMAR™ (immune serum globulin), IVEEGAM™ (immune serum globulin), SANDOGLOBULIN™ (immune globulin), GAMMAGARD S/D™ (immunoglobulin), and GAMIMUNE™ (immune serum globulin). In a specific embodiment, antibody and antibody compositions of the invention are administered in combination with intravenous immune globulin preparations in transplantation therapy (e.g., bone marrow transplant).

Please replace paragraph [0308] with the following revised paragraph.

[0308] CD40 ligand (CD40L), a soluble form of CD40L (e.g., ~~AVREND™~~ avrend), biologically active fragments, variants, or derivatives of CD40L, anti-CD40L antibodies (e.g., agonistic or antagonistic antibodies), and/or anti-CD40 antibodies (e.g., agonistic or antagonistic antibodies).